

glance at a series of specimens is all that is needed to convince the most sceptical that *P. Lilfordi* is an excellent species.

Our second bird is from the British islands; and it is proposed to call it

*Parus britannicus*, n. sp.

*P. similis P. atro*, sed paullo minor et dorso semper olivaceo-fulvo distinguendus.

The Coal Titmouse of England will be found, on comparison with Continental examples, to be perfectly distinct, inasmuch as it has the back olive-buff, quite different from the species from the mainland, which has a slaty-blue back. Any one who examines the Coal Titmouse figured in English works, and compares it with the figure given in any Continental book, will see that, as each naturalist illustrates the bird found in his own country, the plates do not at all agree. We have now before us a large series of the two species, shot at all seasons of the year in England, and from nearly every part of the Continent. Both species will be figured in our work on the Birds of Europe.

#### MISCELLANEOUS.

*On a new Species of Buceros.* By G. R. GRAY.

[Plate XVII.]

HAVING had my attention drawn by Mr. E. Bartlett to a head and bill of a species of *Buceros* which, on examination, presented in its formation very remarkable differences from any of the known species of that group of birds, I am induced to offer the following description of its singular and distinctive characters, under the name of

*Buceros (Byanistes?) casuarinus.* Pl. XVII.

Bill broad at base, laterally compressed to the tip; casque elevated posteriorly and extending somewhat backwards over the eyes, rather compressed along the culmen, which is flat and grooved along the middle for two thirds of its length, the sides of the casque shelving to the nasal channel, and furnished with six deep oblique grooves; the sides below the former are comparatively smooth, and with three apparent scales near the eyes; the nostrils are large and deeply imbedded in a broad channel which runs along the sides of the maxilla for about two thirds of its length, in which they are situated at its base; the mandibula has the gonyes long and curved to the tip: the sides are furnished with four very obliquely placed grooves, advancing towards each other beneath

the gonyx; the margins of both mandibles are dentated in the middle.

The length from the upper part of the base of the casque to the tip of the maxilla is five inches and three lines.

The head which forms the subject of this description is supposed to have been brought from West Africa.

*Observations on some points in the Embryology of the Lemuroidea, and on the Zoological Affinities of those Animals.* By M. ALPH. MILNE-EDWARDS.

In all existing systems of classification the Lemuroidea form with the Monkeys a single group, called *the order Quadrumana*. Various anatomical considerations had led me to doubt the correctness of this approximation; and I had a lively desire to ascertain whether the characters drawn from the development of the embryo would support or contradict it. Therefore, when my friend M. A. Grandidier started upon his last voyage of exploration in Madagascar, I directed his attention to this point, requesting him to seek carefully for female Lemuroidea in a state of gestation. The results obtained by him surpassed my hopes; for he procured fœtuses belonging to four different genera of the group Lemuroidea; and these he has been kind enough to place at my disposal.

The dissections that I have made of these have enabled me to ascertain that, with regard to the intra-uterine development, there exist essential differences between the Lemuroidea and the Apes. It is well known that in the latter the placenta is small, discoidal, and intimately united with the uterine decidua, and that the umbilical vesicle is greatly reduced, and even disappears very early. The Lemuroidea present a very different arrangement. Thus, in *Propithecus*, which may be regarded as one of the highest representatives of the type under consideration, and consequently as nearest to the Monkeys, the chorion is almost entirely covered with thick and close villosities, constituting a sort of vascular cushion, and forming the placenta, which forms almost a complete hood over the amnios, and which I shall denominate the *bell placenta* (*placenta en cloche*) in opposition to the *discoidal placenta* of man and the monkeys, the *zonary placenta* of the Carnivora, and the *diffused placenta* of the Herbivora. The villosities, which are very much tufted towards the middle and upper portions of the ovum, gradually diminish as they approach the cephalic pole, where they disappear almost entirely over a small space. The uterine decidua is greatly developed, and presents a corresponding arrangement.

Between the chorion and the amniotic coat we find a vast membranous sac extending in the direction of the major axis of the ovum, and adhering to the umbilical cord by a short slender peduncle. This sac is elongated so as to form at each of its extremities a sort of digitiform horn, and only contracts slight adhesions to the two adjacent coats; none of the large vessels of the cord are distributed upon it. If air is injected into this sac under water, it is distended